

I claim:

1. A composition for application to the oral mucosa comprising a tetracycline and a pharmaceutically acceptable carrier selected from the group consisting of a mucoadhesive polymer, a viscous polymer gel and a hydrogel.
2. The composition of claim 1 wherein the mucoadhesive polymer is a cationic polymer.
3. The composition of claim 1 wherein the polymer is a natural polymer.
4. The composition of claim 1 wherein the tetracycline is poorly absorbed.
5. The composition of claim 1 wherein the tetracycline is mecloxycline.
6. The composition of claim 1 wherein the tetracycline is amorphous.
7. The composition of claim 1 wherein the tetracycline is a base.
8. The composition of claim 1 wherein the tetracycline is a salt.
9. The composition of claim 1 for treating or preventing oral mucositis comprising an effective amount of tetracycline to treat mucositis.
10. The composition of claim 1 wherein the mucoadhesive polymer ionizes to form a cationic polymer upon contact with an aqueous medium.
11. The composition of claim 1 wherein the mucoadhesive polymer is a polyamine.
12. The composition of claim 1 wherein the carrier provides sustained or controlled release of the tetracycline.
13. The composition of claim 2 wherein the cationic polymer is chitosan.
14. The composition of claim 1 wherein the mucoadhesive polymer is gelatin
15. The composition of claim 2 wherein the cationic polymer is a gelatin with an isoelectric point of 7 or more.
16. The composition of claim 14 wherein the gelatin is fish gelatin.

17. The composition of claim 1 wherein the hydrogel carrier provides for rapid release of the tetracycline.

18. A method for treating or preventing oral mucositis resulting from radiation or chemotherapy for cancer comprising administering to a patient an effective amount of a composition comprising a tetracycline and a pharmaceutically acceptable carrier selected from the group consisting of a mucoadhesive polymer, a viscous polymer gel and a hydrogel.